

Database Triggers Exercise

Use the IQSchool Database

1. To be fair to all students, a student can belong to a maximum of 3 clubs. Create a trigger to enforce this rule.
2. The Education Board is concerned with rising course costs! Create a trigger to ensure that a course cost does not get increased by more than 20% at any one time.
3. Too many students owe us money and keep registering for more courses. Create a trigger to ensure that a student cannot register for any more courses if they have a balance owing of more than \$500.
4. To keep track of balance owing changes, we want to create a logging table that will log any changes to the BalanceOwing in the Student table. You must create the logging table and the trigger to populate it when a balance owing is updated.

BalanceOwingLog	
StudentID	integer
DateChanged	date
OldBalance	decimal (7,2)
NewBalance	decimal (7,2)

5. Create a trigger that rejects insertion of a course where MaxStudents is below 2.
6. Create an insert trigger on Student that automatically generates a new StudentID using $\text{Max}(\text{StudentID}) + 1$ but only if the insert statement does not provide a StudentID.